



National Capital Area Chapter
Society of Toxicology Newsletter
Electronic Edition

October 2018

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Frederic Moulin, Editor

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CHAPTER MISSION STATEMENT

The National Capital Area Chapter of the Society of Toxicology (NCAC-SOT) was established to provide a regional focus for scientists of all disciplines interested in toxicology. The Chapter acts to:

- Sponsor and co-sponsor symposia on current issues in toxicology.
- Provide annual awards to an outstanding student and postdoctoral scholars in toxicology to assist in attending the annual meeting of the SOT.
- Maintain communication with the National SOT regarding current toxicology and regulatory concerns.
- Sponsor Regional Chapter events at the SOT Annual Meetings.

MESSAGES FROM THE NCAC-SOT EXECUTIVE BOARD MEMBERS

President's Message



Toxicology: Do, or Do Not. There is No “Try”!

As I've been finalizing logistics for the October 25th NCAC symposium, I've had the opportunity to engage with toxicologists at different stages of their careers and find out what NCAC can do to make the professional journey as a toxicologist fun and interesting. I learned that each toxicologist feels overwhelmed keeping up with the science and practice of toxicology. Toxicologists want to find a simple way to keep up to date and identify ways to advance their expertise in toxicology. Here is the advice that I provided to each:

- **Read SOT publications!** SOT provides with you with an [interesting blog](#) that is updated weekly. Just remember to go to the main SOT website to access, or better yet, contribute to the blog. [ToxSci](#) is one of the best publications in our field, and represents our collective research efforts. Make use of it. For those of you still getting *ToxSci* mailed to you via snail mail, I encourage you to read it, as opposed to placing it on your “to read” pile on your desk which never gets read (and I know there are dozens of you out there!).
- **Attend SOT-sponsored regional, national, and thematic meetings!** Learning about the advances in toxicology and related disciplines (risk assessment, alternatives assessment, exposure assessment) is not magic! I learn by doing, and I attend meetings with active participation and questioning. Check out SOT's upcoming [Future Tox meeting in Arlington](#) (November 14-16, 2018), and definitely attend the [SOT Annual Meeting](#) March 10-14 in Baltimore. There are 73 sessions and 14 CE courses planned, so plenty for each of us to learn from! Take the time to attend our spring and autumn NCAC symposia, and provide the NCAC with feedback on what you liked and didn't like about the topic so that we can cater to you.
- **Consider becoming a Diplomat!** Becoming a Diplomat of the [American Board of Toxicology](#) (DABT) is not for everyone, but it will compel you to study areas that you may not normally work in, and this will make you a better toxicologist. The “new” DABT exam is better balanced at assessing a toxicologist's qualifications to assess the harm of substances to humans and the environment. A senior toxicologist from the consulting field just returned from taking the DABT exam on October 6th and remarked to me that ecotoxicity-related questions were peppered throughout the exam (kudos, ABT Board!). I have been a DABT for a good number of years and I just downloaded the ABT Practice App on Google Play (the app is also available through iTunes). It is actually fun to answer the questions and keep up to date!

As members of SOT, we have each pledged to fulfill the Society's [Code of Ethics](#) and share our knowledge and be thoughtful advocates for human, animal, and environmental health. One of my favorite quotes is from Yoda, who said, “Do, or do not. There is no “try”! Similarly, I encourage each of you to get involved and “Do” get involved in Society activities!!

Margaret Whittaker
NCAC-SOT President

Vice President's Message



Dear NCAC-SOT Members:

As Vice President, it was my pleasure to put together the upcoming Fall Symposium, “The Intersection of Predictive Toxicology Roadmaps - Tox21, FDA’s Predictive Tox Roadmap, and ToxCast.” I appreciate all the help and insight from my fellow officers in this challenging task. We have a great and impressive line-up of speakers from the FDA, EPA, and industry. I have enjoyed putting this symposium together and getting to know the speakers and NCAC officers. I hope that all members will enjoy the outcome of all of our hard work.

Due to changes in my obligations, I will not be able to continue in my role as Vice President; however, I wish the best to all members and also for the continued success of NCAC-SOT.

Emily Madden
NCAC-SOT Vice President

Postdoctoral Representative's Message



Dear NCAC-SOT members,

Serving as the NCAC postdoctoral representative these last two years has been a true pleasure. This elected position enabled me to gain essential leadership skills and foster relationships with other toxicologists in my region. The Executive Board will send notification for when they will begin accepting self-nominations or peer nominations for the postdoctoral representative position, which is a two-year position beginning in May 2019.

Postdoc News

- Plans are underway for the 58th SOT Annual Meeting in Baltimore. Be sure to **update your ToX-change profile** and membership to Postdoctoral Member, if needed. Events of interest to postdocs include the **Postdoctoral Assembly Luncheon, Poster Tours** for Trainees, **Student/Postdoc Mixer, SOT Mentoring Breakfast, Chat with an Expert, In Vitro Lecture**, a **PDA-sponsored Career Development Session**, and Career Exploration through **Speed Informational Interviews**. Some of these events sell out quickly, so postdocs are advised to book in advance.
- Begin to prepare your application for the **NCAC Bern Schwetz Travel Award**. Winners receive cash awards to support attending the Annual Meeting. Applications are due on December 31. Details are on the NCAC website.
- Webinars and continuing education courses are free to postdocs on the SOT website. Topics include crafting a grant application, soft skills needed for your career, steps in becoming a board-certified toxicologist, details about risk assessment careers, and exploring career paths in toxicology.
- An online mentoring program, **Mentor Match**, is available for postdocs that are SOT members. Registration is available on the SOT website.
- Job seekers can register at the **SOT Job Bank** for free. Jobs are posted on the site, and some employers have interviews at the annual meeting.
- **The Rising Star** Campaign has been launched and is raising financial support for postdocs to pursue career development activities including providing access to AAAS career development courses. Donations are encouraged at the SOT website.

Laura C. Savery, PhD
NCAC Postdoctoral Representative

Secretary's Message



Dear NCAC members,

I hope you had a great summer. As a regional chapter in the Washington DC area, NCAC had another fruitful year. We organized two great scientific meetings. The 2017 fall meeting had a theme on TSCA and we had several speakers from EPA. The 2018 spring meeting had a theme on consumer product safety and Dr. Michael Babich from Consumer Product Safety Commission (CPSC) was the keynote speaker. The meeting material is available on the [NCAC website](#).

For the upcoming events, we will have our 2018 fall symposium on October 25, 2018 with a focus on Predictive Toxicology at the NIH campus, the meeting agenda and registration information is available on NCAC website. We are so excited that the 2019 SOT AM will be at our home location. As usual, NCAC will host an annual reception at SOT and it is a great time for socializing. We are looking forward to seeing you at the 2018 fall symposium and at the SOT Annual Meeting!

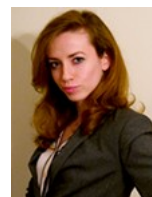
Xinrong Chen
NCAC-SOT Secretary

Graduate Student Representatives' Message



Dear National Capital Area Chapter Student Members,

We hope everyone had a wonderful summer and that you are looking forward to a productive year ahead! First, we would like to introduce ourselves as your new student representatives. Dana Freeman is your Graduate Student Representative and Sarah Attreed is your Vice Graduate Student Representative. We're both PhD candidates in Toxicology at Johns Hopkins Bloomberg School of Public Health and are very excited to for a great year with the National Capital Area Chapter. We have a lot of exciting events coming up for students:



1. The National Capital Area Chapter will be hosting a Fall Symposium on October 25, 2018. The topic for the symposium is "Toxicology in the 21st Century (Tox21)" and we have talented speakers from both government and industry lined up to discuss emerging tools and methods in predictive toxicology. We will also be hosting a mentoring luncheon at the meeting. This is a great opportunity to meet experts in the field and expand your local network. Registration for the symposium is free and reimbursement for student travel is available.
2. The Society of Toxicology Annual Meeting will be held March 10-14th, 2019 in Baltimore, MD. Abstract submission will be open until October 19th at 11:59 pm. Information for travel awards can be found at <http://www.toxicology.org/awards/sot/awards>. This meeting is an excellent opportunity to share ideas, network, and learn about the incredibly broad field of toxicology. At the meeting, we will have a National Capital Area Chapter Mixer, so be on the lookout for those details as well.
3. The International Union of Toxicology and the Society of Toxicology have announced that the next triennial International Congress of Toxicology (ICT) will be held July 15-18, 2019 in Honolulu, Hawaii. Abstract submission will be open until November 30, 2018. This will be the first ICT to take place in the United States since 1995. It is sure to be an eye-opening experience and full of informative sessions with experts from all over the world. You won't want to miss it!

If you have any questions about upcoming events, please don't hesitate to reach out to Dana Freeman (dfreem20@jhmi.edu) or Sarah Attreed (sattree1@jhmi.edu). You can also reference our graduate student page on the chapter website: <http://www.toxicology.org/groups/rc/ncac/students>.
Best,

Dana Freeman and Sarah Attreed
NCAC-SOT Graduate Student Representatives


Student Liaison's Message



Dear Graduate Students and Postdoctoral Scholars,
Thank you for your support of NCAC by being an NCAC member. One of the benefits of your NCAC membership is the ability to apply for funds to attend the SOT Annual Meeting. If you are a full-time graduate student or a postdoctoral scholar and your abstract to the 58th Society of Toxicology Annual Meeting in Baltimore, MD has been accepted, you are eligible to apply for the NCAC Bern Schwetz Student Travel Award. This cash award is provided to support students presenting at the Annual Society of Toxicology Meeting.

The deadline to apply for the NCAC-SOT Bern Schwetz Student Travel Award is December 31, 2018. If you are interested in submitting an application, please consult the NCAC-SOT website for application criteria and a [list of past award recipients](#). If you have additional questions, please contact [Dr. Elena Braithwaite](#).

The abstract application deadline for the SOT Annual Meeting was October 9, 2018. Other pertinent deadlines for the 2019 SOT Annual Meeting are listed in the table below:

 58TH ANNUAL MEETING & ToxExpo • MARCH 10-14, 2019	
Timeline of Events for SOT's 58th Annual Meeting in Baltimore, MD	
SOT Annual Meeting Abstract Deadline https://www.toxicology.org/events/am/AM2019/abstracts	October 19, 2018
Early bird registration https://www.toxicology.org/events/am/AM2019/registration	Now – January 11, 2019
Deadline for Bern Schwetz Travel Award Application	December 31, 2018
Standard registration	January 12, 2019 – February 7, 2019
Registration and Housing Deadline https://www.toxicology.org/events/am/AM2019/housing	February 7, 2019
Final registration begins	After February 7, 2019
2019 SOT Annual Meeting, Baltimore, MD https://www.toxicology.org/events/am/AM2019/General-Information	March 10-14, 2019

Please consider applying for the National Capital Area Chapter (NCAC) Bern Schwetz Student Travel Award

Elena K. Braithwaite
NCAC-SOT Student Liaison Councilor

NCAC Treasurer's Report

Date: 14 September 2018



NCAC Financials (from HQ): 1 July 2017 through 30 June 2018

Income	Amount (\$)
Donations	3,894.04
Dues	4,550
Registration (Spring)	1,575
Registration (Fall)	925
Total Income	10,944.04
Expense	
K-12 Outreach	-560
Meeting (Spring)	-2,825.45
Meeting (Fall)	-3,150.22
Meeting (Reception)	-2,416.69
Misc./Other (t-shirts)	-1,849.29
Total Expense	-10,801.65
Net Cash Flow	142.39
Closing Check Acct Balance	15,793.28

Bank Statement: 31 July 2018

Income	Amount (\$)
Deposit	60.00
Total Income	60.00
Expenses	
RSF Award (Chk #1395)	-100.00
RSF Award (Chk #1399)	-100.00
RSF Award (Chk #1401)	-25.00
RSF Award (Chk #1402)	-100.00
RSF Award (Chk #1403)	-50.00
RSF Award (Chk #1404)	-50.00
RSF Award (Chk #1405)	-50.00
RSF Award (Chk #1407)	-50.00
RSF Award (Chk #1411)	-100.00
Total Expenses	-625.00
Closing Check Acct Balance	15,228.28

Bank Statement: 31 August 2018

Income	Amount (\$)
Deposit	N/A
Total Income	None
Expenses	
RSF Award (Chk #1385)	-25.00
RSF Award (Chk #1389)	-25.00
RSF Award (Chk #1400)	-50.00
RSF Award (Chk #1408)	-20.00
Total Expenses	-120.00
Closing Check Acct Balance	15,108.28

D. Charles Thompson
NCAC-SOT Treasurer

Newsletter Editor's Message



Dear NCAC-SOT Members,

It is my pleasure to introduce myself as the new Editor of our Chapter's Newsletter. I will be taking over the duties of Gertrude-Emilia Costin, and intend to continue, to the best of my abilities, the fantastic work she has done for our chapter. You can expect to find in this edition all the rubrics you have grown accustomed to, and in turn I hope that you will share with our membership your experiences in the form of messages, pictures and/or articles sent to moulinfj@gmail.com. I promise to find a place for all of them in our newsletter.

I am a French veterinarian, and grew up in Normandy, a few miles from the D-day landing beaches. Through laboratory animal medicine, I became interested in toxicology, and pursued a PhD at Michigan State University in the laboratory of our past SOT President, Dr. Patricia Ganey. After a postdoctoral sojourn in the cradle of industrial toxicology, and by this I mean the old CIIT under Dr. Roger McClellan, I joined Drug Discovery at Bristol-Myers Squibb. Thirteen years later I transitioned from discovery to drug approval at the FDA where I am currently a nonclinical reviewer.

I look forward to the activities of the incoming year almost as much as I am hoping for the leaves to finally gain their beautiful shades of red and yellow. In late October, I plan to see you at our Fall symposium on the NIH campus, and in the spring at the Annual Meeting of the Society of Toxicology in Baltimore. I missed the previous SOT gathering in our region due to a combination of influenza outbreak and snow storm, but in 2019 I will be ready for our chapter mixer and all the culinary recommendations of our Johns Hopkins student councilors.

Finally, I would like to extend a few words of comfort to my fellow skiers and snowboarders, who like me have trudged through five months of unbearably hot and humid summer weather, pool parties and beach activities. Take heart for our favorite weather is on the way. Soon, the region will be blanketed again by glistening ice and snow and we will gather on the slopes of our local resorts...

Winter is coming!

Frédéric Moulin
NCAC-SOT Newsletter Editor



NCAC-SOT MEMBERSHIP

Don't forget to renew both your SOT and NCAC memberships this year! Annual membership fees for NCAC-SOT remain unchanged this year and are only \$25 for regular memberships and \$10 for full-time students. These fees are used to fund our symposium each year and to support a myriad of student activities, including student awards, travel supplements, and K-12 outreach.

If you have not yet renewed your regional Chapter membership, please do so today! You can do that [online](#) or by mail using the membership application form on the next page.



National Capital Area

MEMBERSHIP APPLICATION

Name: _____

Affiliation: _____

Address _____

City: _____

State: _____ Zip Code: _____

Area Code: _____ Phone: _____ FAX: _____

E-mail: _____

Membership Type _____ Full Member (\$25) _____ Student (\$10)

Please check the most appropriate responses:

SOT Member	Highest Degree Attained	Type of Affiliation
<input type="checkbox"/> Yes	<input type="checkbox"/> A.S.	<input type="checkbox"/> Academia
<input type="checkbox"/> No	<input type="checkbox"/> B.A.	<input type="checkbox"/> Consulting
	<input type="checkbox"/> B.S.	<input type="checkbox"/> Contract Lab
	<input type="checkbox"/> D.V.M.	<input type="checkbox"/> Government
	<input type="checkbox"/> D.V.M./Ph.D.	<input type="checkbox"/> Industry- Chemical/Petroleum
	<input type="checkbox"/> M.D.	<input type="checkbox"/> Industry- Pharmaceutical
	<input type="checkbox"/> M.D./Ph.D.	<input type="checkbox"/> Industry- Other
	<input type="checkbox"/> M.P.H.	<input type="checkbox"/> Other- _____
	<input type="checkbox"/> M.S.	
	<input type="checkbox"/> M.A.	
	<input type="checkbox"/> Ph.D.	
	<input type="checkbox"/> Sc.D.	
	<input type="checkbox"/> V.M.D.	
	<input type="checkbox"/> V.M.D./Ph.D.	

Please complete the information above and send with a check, money order or credit card (payable to National Capital Area Chapter SOT, no POs) to the address below. The NCAC SOT will review your application, and you will be notified within 30 days. Those not accepted will receive a full refund. *Current RC members: please do not use this form since your renewal dues are billed annually through SOT.*

Payment Type: Money Order _____ Check _____ Credit Card _____

Credit Card # _____ Exp date _____

Name on Card _____

Signature _____

Please send completed form with payment to:

Society of Toxicology, ATTN: Ashley Black
11190 Sunrise Valley Drive, Suite 300
Reston, VA 20191

Current NCAC-SOT Members

Dear NCAC-SOT members,

The NCAC-SOT Executive Board considers useful to publish the membership roster in each newsletter. As of October 2018, the Chapter members are listed below (*First Name, Last Name, Institution*):

Valerie	Adams	US Army Public Health Center
Felix	Adatsi	PreTrial Services Agency
Lauren	Amable	National Institute on Minority Health and Health Disparities
Devon	Andres	JPEO-CBD Medical Counter-measures Systems
Jay	Ansell	Personal Care Products Council
Louise	Assem	ICF International
Sarah	Attreed	Johns Hopkins University
Michael	Babich	US Consumer Product Safety Commission
Sainath	Babu	Hampton University
Robert	Bass	Virginia Tech
Cheryl	Bast	Keller and Heckman LLP
Christopher	Bates	Exponent Inc
Ilona	Bebenek	US FDA
Nancy	Beck	American Chemistry Council
Richard	Becker	American Chemistry Council
Tracy	Behrsing	US FDA
Rosonald	Bell	Indivior
Adrienne	Black	3E Company
Uni	Blake	American Petroleum Institute
Mike	Bolger	Exponent Inc
Gary	Bond	US FDA-CDER
Ivan	Boyer	Cosmetic Ingredient Review
Steven	Bradbury	Steven P Bradbury & Associates LLC
Elena	Braithwaite	US FDA
Kelly	Brant	US FDA
Richard	Braun	US Army Corps of Engineers
Chad	Brocker	National Cancer Institute
Deborah	Burgin	CDC-ATSDR
John	Burns	
Connie	Chen	ILSI Health and Environmental Sciences Institute
Tracy	Chen	US FDA
Xinrong	Chen	U S Consumer Product Safety Commission
Weihseh	Chiu	Texas A&M University

Chrissy	Cochran	US FDA
Joseph	Contrera	Computational Toxicology Services LLC
Lisa	Cooper	DSM Nutritional Products Ltd
Erdem	Coskun	National Institute of Standards and Technology
Gertrude-Emilia	Costin	Institute for In Vitro Sciences
Rodger	Curren	Institute for In Vitro Sciences
Irina	Dahms	DSM Nutritional Products Ltd
Pedro	Del Valle	US FDA-CDER
Marcus	Delatte	US FDA-CDER
Paul	DeLeo	Integral Consulting Inc
Jose	Delgado-Jimenez	National Cancer Institute
John	DeSesso	Exponent Inc
Laxmikant	Deshpande	Virginia Commonwealth University
Deacquni-ta	Diggs	US FDA
Kimberly	Ehman	Altria
Marion	Ehrich	Virginia-Maryland College of Veterinary Medicine
Michelle	Embry	ILSI Health and Environmental Sciences Institute
Neeraja	Erraguntla	American Chemistry Council
Bernadette	Ezeabikwa	University of Maryland Eastern Shore
Louan	Fisher	Toxicology Regulatory Services (TRS)
Suzanne	Fitzpatrick	US FDA
Jennifer	Fleischer	ToxServices LLC
Thomas	Flynn	US FDA-CFSAN
Dana	Freeman	Johns Hopkins University
Shayne	Gad	Gad Consulting Services
Angela	Gallup	Charles River Lab
Joan	Garey	Reproductive Toxicology Center
Narayana	Garimella	US FDA
Lee	Geiger	Geiger Toxicology Consulting

Chan-dramallika (Molly)	Ghosh	US FDA-CDRH
Peter	Goering	US FDA
Julia	Gohlke	Virginia Tech
Emily	Golden	ToxServices LLC
Gopakumar	Gopala-krishnan	Supernus Pharmaceuticals Inc
Sidney	Green	
James	Griffiths	Council for Responsible Nutrition CRN
Rupa	Guha	University of Maryland Baltimore
Jaspreet	Gujral	Avon Products
Maureen	Gwinn	US EPA/Office of Research and Development
Karen	Hamernik	US EPA
Georgina	Harris	Center for Alternatives to Animal Testing
Wafa	Harrouk	US FDA-CDER
Kristina	Hatlelid	US Consumer Product Safety Commission
Sara	Henry	Retired
Tala	Henry	US EPA-OPPTS
Colette	Hodes	US EPA-OLEM
Charisse	Holmes	PRA Health Sciences
Alan	Hood	US FDA
Eric	Hooker	US Consumer Product Safety Commission
Keith	Hostetler	Toxicology Regulatory Services (TRS)
Terry	Hrubec	Via College of Osteopathic Medicine Virginia Campus
Annette	Iannucci	Occupational Safety and Health Administration
Jon	Inglefield	Emergent BioSolutions Inc
William	Irwin	Regulatory
David	Jackson	US Army Center for Environmental Health Research
Sandra	James-Yi	
Erik	Janus	M ³ Technical & Regulatory Services
David	Jett	NIH Countermeasures Against Chemical Threats (CounterACT) Research Program
Yunhee	Ji	
Bernard	Jortner	Virginia-Maryland College of Veterinary Medicine, Virginia Tech
Elizabeth	Katz	US FDA

Athena	Keene	Afton Chemical Corporation
Do Hyung	Kim	Henry M Jackson Foundation for the Advancement of Military Medicine Inc
James	Kim	EOP Office of Management and Budget
Elaine	Knight	NIH-NCI
Charles	Kokoski	US FDA
Gopala	Krishna	Supernus Pharmaceuticals Inc
Francis	Kruszewski	American Cleaning Institute
Rohan	Kulkarni	MilliporeSigma (BioReliance/EMD Millipore)
Susan	Laessig	US EPA-OCSP
Cindy	Landgren	Defense Threat Reduction Agency
Amy	Lavin Williams	Exponent Inc
Jonathan	Leshin	United States Public Health Service
Nastassja	Lewinski	Virginia Commonwealth University
Cissy	Li	US FDA-CFSAN
Anne	Loccisano	Exponent Inc
Linda	Loretz	Personal Care Products Council
Lindsey	Lund	ToxServices LLC
Judith	MacGregor	Toxicology Consulting Services
Madisa	Macon	US FDA
Emily	Madden	ToxServices LLC
Michael	Madejczyk	US Army CEHR
Susan	Makris	US EPA-ORD
Wimolnut	Manheng	US FDA-CDER
Nikki	Maples-Reynolds	Waterborne Environmental Inc
Joanna	Matheson	US Consumer Product Safety Commission
Antonia	Mattia	US FDA
Kathleen	McCoy	Virginia Commonwealth University
Timothy	McGovern	US FDA
Marie	McKeon	MilliporeSigma (BioReliance/EMD Millipore)
Colleen	McLoughlin	Scivera LLC
Beth	Milesen	Technology Sciences Group Inc

Michael	Morrow	JPEO Medical Countermeasure Systems
Frederic	Moulin	US FDA
Brian	Mulhern	SciLucent LLC
Caitlin	Murphy	Smithers Avanza
Laine	Myers	US FDA
Arvind	Nandedkar	Howard University
Alexander	Nguyen	North Carolina State University
Simone	Nicholson	MedImmune Inc
Andrey	Nikiforov	Toxicology Regulatory Services (TRS)
Kristin	Noell	University of Maryland Eastern Shore
Elyse	Osterweil	US EPA
Teresa	Palacios-Hernandez	US FDA
Geoffrey	Patton	US FDA
Leslie	Patton	Technology Sciences Group Inc
Syrl	Pettit	ILSI Health and Environmental Sciences Institute
Jennifer	Pierson	ILSI Health and Environmental Sciences Institute
Anne	Pilaro	US FDA-CBER
Caroline	Pinto	US EPA-ORISE
Karen	Porter	PointCross Life Sciences
Resha	Putzrath	Navy and Marine Corps Public Health Center
Kathleen	Raffaele	US EPA-OSWER
Deepa	Rao	US FDA
Jennifer	Rayner	SRC
Gunda	Reddy	Army Public Health Center
Emily	Reinke	Army Public Health Center
Paul	Roney	BARDA
Leah	Rosenfeld	US FDA
Laurie	Roszell	Army Public Health Center
Tinashe	Ruwona	Institute for In Vitro Sciences
Kristal	Rychlik	Johns Hopkins University
Shakil	Saghir	Smithers
Nandakumara	Sarma	US Pharmacopeia
Laura	Savery	US FDA
Louis	Scarano	US EPA
Anthony	Scialli	Scialli Consulting LLC

Alfred	Sciuto	US Army Medical Research Institute of Chemical Defense
Ankit	Shah	Frederick National Laboratory for Cancer Research
Fenna	Sille	Johns Hopkins Bloomberg School of Public Health
Shelby	Skoog	US FDA
Deborah	Smegal	US FDA
Rosie	Sneed	University of the District of Columbia
Babasaheb	Sonawane	Tracs LLC
Martin	Stephens	Johns Hopkins Bloomberg School of Public Health
Stephan	Stern	Cancer Research Technology Program Leidos Biomedical Research Inc
Anneliese	Striz	US FDA
Dale	Strother	ToxSolve LLC
Evi	Struble	US FDA
David	Szabo	Reynolds American Inc
Jennifer	Tanir	ILSI Health and Environmental Sciences Institute
Sean	Taylor	Verto Solutions
Shaji	Theodore	US FDA
Richard	Thomas	Intercet Ltd
Christopher	Thompson	Virginia Tech
D Charles	Thompson	US FDA-CDER
Vy	Tran	Johns Hopkins Bloomberg School of Public Health
Richard	Troast	Troast Environmental Consulting
Lorraine	Twerdok	Twerdok Consulting, LLC
Vipin	Tyagi	University College of Medical Sciences & GTB Hospital Delhi University
Zemin	Wang	US FDA
Zhibin	Wang	Johns Hopkins University
Ronald	Wange	US FDA
Marvin	Webb	University of Maryland Eastern Shore
Zhengxi	Wei	University of Rhode Island
Kimberly	White	
Margaret	Whittaker	ToxServices LLC
Paddy	Wiesenfeld	US FDA-CFSAN
Gary	Wolfe	Gary Wolfe Toxicology LLC
Elissa	Wong	
Linnzi	Wright	US Army Edgewood Chemical Biological Center
Menghang	Xia	NIH
James	Yager	Johns Hopkins Bloomberg School of Public Health

NCAC-SOT EXECUTIVE BOARD MEMBERS CONTACT LIST

President: Margaret Whittaker (2017-2018)
ToxServices LLC
Mwhittaker@toxservices.com

Vice President: Emily Madden

Treasurer: D. Charles Thompson
U.S. Food and Drug Administration
dct590122@comcast.net

Secretary: Xinrong Chen
U.S. Consumer Product Safety Commission
Xinrong_chen@hotmail.com

Councilors: Lorraine Twerdok
Website Coordinator
Twerdok Consulting, LLC
letwerdok@verizon.net

Elena Braithwaite
Student Liaison
U.S. Food and Drug Administration
doctorelena@yahoo.com

Frederic Moulin
Newsletter Editor
U.S. Food and Drug Administration
moulinfj@gmail.com

Postdoctoral Representative: Laura Savery
U.S. Food and Drug Administration
saverylc@gmail.com

Graduate Student Representative: Dana Freeman
Johns Hopkins University
dfreem20@jhmi.edu

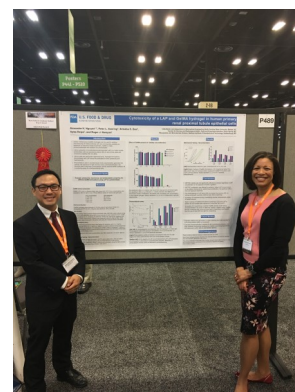
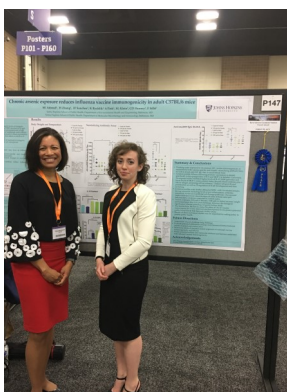
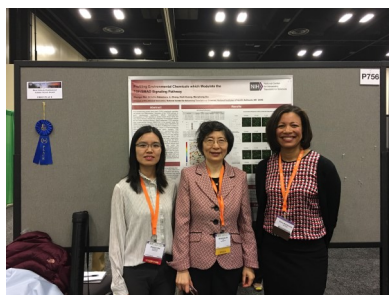
Graduate Student Vice-Representative: Sarah Attreed
Johns Hopkins University
sattree1@jhmi.edu

NCAC-SOT ACTIVITIES UPDATE

2018 Spring/Summer Meeting Reports

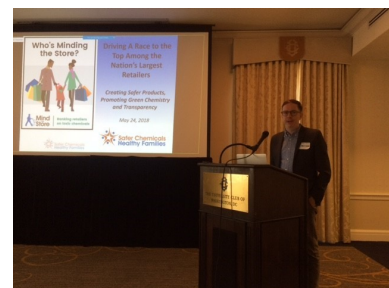
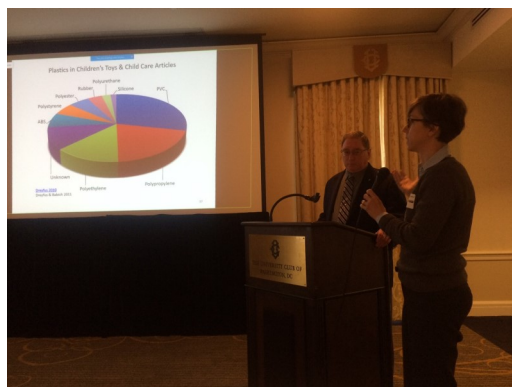


The NCAC-SOT organized a joint reception with the North Carolina Chapter of the Society of Toxicology (NCSOT) during the 57th SOT Annual Meeting in San Antonio. It was held at Pat O'Brien's, across from my haunted hotel, and I was proud to represent with our treasurer, the NCAC board. It was an unusual establishment, combining a traditional Hispanic architecture with a very Irish collection of beers. I elected to sample a variety of Texas home brews, and as a result my recollection of the event is somewhat fuzzy. Nonetheless I had a great time, plenty of laughing, and I definitely look forward to seeing everybody again next year in Baltimore.



This spring, the NCAC-SOT held its spring symposium at the University Club of Washington DC on May 24. The theme of the symposium was “Consumer Products – Motivating and Promoting Toxicity Reduction” and we heard from a great panel of speakers about various “green chemistry” initiatives and strategies aimed at gently “nudging” the consumer products industry in the direction of greater sustainability and reduced toxicity. The University Club was a beautiful location and unfortunately my old iPhone camera could not do justice to the setting.

You can find a complete description of the program as well as all the slide presentations from the speakers on our [chapter web site](#).



2018 Fall/Winter Meeting Announcements



The National Capital Area Chapter of the Society of Toxicology will be holding its Fall Symposium entitled **“The Intersection of Predictive Toxicology Roadmaps - Tox21, FDA’s Predictive Tox Roadmap, and ToxCast”** on Thursday, October 25, 2018 from 8:30 AM – 4:30 PM at the NIH Campus, Bethesda, MD. Please be sure to register before October 19, 2018 to ensure we have adequate space to accommodate everyone. We look forward to seeing you on October 25th!

Time: October 25, 2018, Thursday, 8:30 AM-4:30 PM

Location: Lister Hill Auditorium (Building 38A), NIH Campus, Bethesda, MD

Directions: The Lister Hill Center Auditorium is located on the NIH main campus. Visitor parking is limited, so take public transportation if possible. The campus is located on the Red Line at the **Medical Center** Metro stop. For more information see <http://www.nih.gov/about/visitor/>

Access and Security: All visitors must enter through [the NIH Gateway Center](#). You will be asked to submit to a vehicle or personal inspection. Visitors over 15 years of age must provide a form of government-issued ID such as a driver's license or passport.

Cost: There is no cost (\$0) for registration and we will host a **mentoring lunch for students and post-docs** where you will have the opportunity to interact with experts in the field of toxicology. A box lunch will be provided for registered students and fellows. General audience: Lunch on your own ([Lister Hill Cafeteria](#) is located On Level B-1, down the stairs in the center of the lobby and to the left).

Registration: [Online registration](#) is preferred for in-person attendance. If you are a member of SOT or have already registered as a guest, please log in with your username and password. If you are not a member of SOT, please follow the [Create New Account](#) link. The same registration interface is used for free and paying meetings, but you will not be charged any fee for this event. If you would prefer to listen remotely, please register [here](#) to receive dial-in information. This link is for both SOT members and guests.

Synopsis:

Advances in predictive toxicology methods and technologies is currently a shared effort among different federal agencies, organizations, and industries. The Toxicology in the 21st Century (Tox21) program is a federal collaboration among the EPA, FDA and NIH to develop new and efficient predictive toxicity methods for the assessment of commercial chemicals, pesticides, food additives and contaminants, and prescription drugs. Federal agency efforts include the FDA’s implementation of a Predictive Toxicology Roadmap for integrating emerging predictive toxicology methods into regulatory safety and risk assessments and the EPA's development of ToxCast, which uses high-throughput screening methods and computational toxicology approaches to screen, evaluate and prioritize chemicals. Predictive toxicology innovations in the Tox21 program are also contributed by new methods and technologies developed by industries for consumer products, chemicals and drugs. This day-long symposium seeks to provide an overview of how the goals and strategies of Tox21, FDA’s Predictive Toxicology Roadmap, and ToxCast intersect and how partnerships between federal agencies, industries, and stakeholders can advance the progress of predictive toxicology methods and technologies.

Fall Symposium Agenda

Time	Topic	Speaker
8:30 – 9:00 am	Arrival/ Registration	
9:00 – 9:15 am	Welcome/Introduction	NCAC Board Member
9:15 – 9:45 am	Predictive Toxicology for Regulatory Decisions: Implementing New Approaches at FDA	Suzanne Fitzpatrick, Senior Advisor for Toxicology, Senior Science Advisory Staff, Center for Food Safety and Applied Nutrition (CFSAN), US Food and Drug Administration (US FDA)
9:45 – 10:15 am	Application of Machine Learning Cheminformatics to the Design of Green(er) Chemicals	Craig Rowlands, Underwriters Laboratories
10:15 – 10:45 am	Break	
10:45 – 11:15 am	Using the 3Rs Principle and Technology to Navigate the Predictive Toxicology Roadmap	Norman C. Peterson, Director, Veterinary Sciences, MedImmune
11:15-11:30 am	Questions	
11:30 am – 1:15 pm	Lunch: Cafeteria is on the floor below LHC auditorium. Mentoring Lunch for Students	General audience: Lunch on your own. Participants in the mentoring luncheon will meet at the lobby area to receive boxed lunches and to join the activity.
1:15 – 1:45 pm	Examples of the Value of Partnering with the US FDA in Toxicology	Paul Brown, ODE Associate Director for Pharmacology and Toxicology, Office of New Drugs Center for Drug Evaluation and Research (CDER), US Food and Drug Administration (US FDA)
1:45 – 2:15 pm	Integrating Alternative Methods for Safety Assessment at FDA's Center for Devices and Radiological Health	Peter Goering, Deputy Director, Division of Biology, Chemistry and Material Sciences, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health (CDRH), US Food and Drug Administration (US FDA)
2:15 – 2:30 pm	Questions	
2:30 – 3:00 pm	Break	
3:15 – 3:45 pm	Modernizing Predictive Toxicology for Regulatory Decisions: Influx of Modern Non-animal Testing Technologies and Strategies	Gertrude-Emilia Costin, Senior Toxicologist, Study Director, Institute for In Vitro Sciences, Inc.
3:45 – 4:15 pm	ToxCast and Tox21: Overview and Future Directions	Reeder Sams, Deputy Director (Acting), National Center for Computational Toxicology, Office of Research and Development, US EPA
4:15 – 4:30 pm	Panel Questions/Discussion and Closing Remarks	NCAC Board Member



58TH ANNUAL MEETING & ToxExpo · MARCH 10-14, 2019

Message from the SOT President

August 23, 2018

I would like to extend a welcome to all toxicologists and scientists to attend the SOT 58th Annual Meeting and ToxExpo. I encourage you to take advantage of the [early-bird registration rates](#) and the [exclusive hotel fees](#) that SOT has arranged.

The [abstract submission site](#) opened on August 15, so you can submit your research for sharing in poster and/or platform format. One thing new for this year is that abstract submissions will be active through October 19, which is about a week or so longer than previous years. Don't wait, though, because you'll find that October 19, will be here before you know it.

In terms of the rest of the scientific program, last year, we introduced all-day Poster Sessions, which will continue in 2019, and this year, we're piloting 90-minute Symposium and Workshop Sessions. The Scientific Program Committee has tentatively accepted 73 sessions for 2019, and the Continuing Education (CE) Committee is working on 14 courses. Information on the sessions and courses is available in the [Program section of the website](#).

Finally, I'd like to remind everyone that the Awards Committee is accepting nominations for SOT Awards. The deadline for these (and the Supported Awards) is October 9. Please consider nominating someone for an award. There are many deserving members, but they have to be nominated to be selected. If you are interested but need more information, I recommend reviewing information on the [SOT Awards by Category page](#) on the SOT website.

Sincerely,

Leigh Ann Burns Naas, SOT President 2018–2019



IMPORTANT DATES

- | | |
|---------------------|---|
| • AUGUST 15 | Abstract Submissions Open |
| • OCTOBER 9 | Awards Deadline |
| • OCTOBER 15 | Scientific Session Details Available |
| • OCTOBER 19 | Abstract Submission Deadline |
| • JANUARY 11 | Early-Bird Registration Deadline |



Other Upcoming Meetings, Webinars & CE Courses of Interest

FutureTox IV Progress to Maturity: Predictive Developmental and Reproductive Toxicology for Healthy Children

November 14-16, 2018, The Westin Crystal City, Arlington, VA

FutureTox IV is focused on bringing together basic, clinical, and regulatory scientists to bridge the translation from historical approaches to Tox21 implementation relative to risk assessment and regulatory decision-making for matters pertaining to developmental health, lifestage progression, and the human reproductive cycle.

2019 ESTIV Applied In Vitro Toxicology Course

The European Society of Toxicology In Vitro (ESTIV) and the American Society for Cellular and Computational Toxicology (ASCCT) are pleased to announce that the next ESTIV Applied In Vitro Toxicology Course will take place at the Faculty of Biology, University of Bucharest, Bucharest, Romania, **April 14-19, 2019**. More information can be found on the course website: <https://estiv2019.com> or in the flyer. Prospective attendees are encouraged to register through the online registration system which is now open.

WHAT'S NEW IN TOXICOLOGY?

ToxScholar Opportunities – Think Local!



Ever since I joined SOT in 2005, I have made a point to be involved in the many education outreach activities that SOT supports. SOT's Education Committee has shared [slides for introduction toxicology](#) and [videos of eminent toxicologists](#) explaining their seminal work, created a [resource of activities for going into classrooms](#) and hosted events at the annual meeting for education outreach. These activities are an important way to expand the understanding of what toxicology is, as well as share with the public what toxicologists do.

One of my favorite activities is [the ToxScholar visits](#). These are often framed as going back to your undergraduate to talk to students about your work and careers in toxicology, which is how I started doing these visits. But they can also be a great way to fund a visit to a local university, using the funds for pizza and soda instead of travel.

For NCAC, there are many small undergraduate colleges and universities that could benefit from a visit, and the ToxScholar program is a wonderful way to build relationships in the local scientific community. It's also a great way to engage with local universities, learn more about their students, and share thoughts with them about the pathway to a career in toxicology. And, it's free pizza!

If you are interested in being a ToxScholar, or interested in having one come to your classroom, please go to <https://www.toxicology.org/awards/sot/awards> for details

For more information on this and other education outreach activities and volunteer opportunities, check out the [Education heading](#) on the SOT web site or contact [Betty Eidemiller](#), the education director of SOT.

Maureen Gwinn
ORD/EPA, NCAC member

MEMBERS ACCOMPLISHMENTS CORNER (March 2018 through October 2018)

The NCAC-SOT likes to acknowledge the accomplishments of its members and celebrate their successes. The NCAC board sends an email twice a year to the members asking to share publications, presentations and other accomplishments from the last issue of the newsletter to date. Please take advantage of this opportunity to share your accomplishments with your colleagues in our Newsletter.

Publications

Books and Manuals

Gad, SC, and CB Spainhour, (2017) *Nonclinical Drug Administration: Formulations, Routes and Regimens for Solving Drug Delivery Problems in Animal Model Systems*, Taylor & Francis, Boca Raton, FL.

Gad, SC, (editor) (2018) *Regulatory Toxicology*, 3rd Ed. Taylor & Francis, Boca Raton, FL.

Gad, SC, (editor) (2018) *Toxicology of the Gastrointestinal Tract*, 3rd Ed., Taylor & Francis, Boca Raton, FL.

Gad, SC, (in preparation) *Integrated Safety and Risk Assessment for Medical Devices and Combination Products*, Springer, Berlin.

Gad, SC, CB Spainhour, D Serota and LA Eagle, (in preparation) *Contract Research Organizations: Their History, Selection and Utilization*, Springer, Berlin.

Gad, SC, (2018) Regulatory Pharmacology/Safety – Risk Analysis Assessment. In: Hill R, Kenakin T, Blackburn T, editors, *Pharmacology for Chemists*, Royal Chemical Society, London.

Gad, SC, (2018) Rodent models for toxicity testing and biomarkers. In: RC Gupta, editor, *Biomarkers in Toxicology*, 2nd Ed., Academic Press, San Diego, CA.

Gad, SC, (2017) Toxicology of Metals. In: *Information Resources in Toxicology*, 3rd Ed. Elsevier, San Diego.

Gad, SC, (2018) Preclinical Safety Evaluation of Stem Cell Products. In: F Richmond, editor, *Encyclopedia of Tissue Engineering and Regenerative Medicine*, Elsevier.

Myers, LP, (2018), Clinical Immunotoxicology. In JC DeWitt et al. editors, *Immunotoxicity Testing: Methods and Protocols*, 2nd Ed., Methods in Molecular Biology series, Humana Press, 1803: 15-26.

Manuscripts

Graham, JC, Wilt N, Costin GE, Villano, C, Bader J, Krawiec, L, Sly E, Gould, J, Evaluation of a tiered in vitro testing strategy for assessing the ocular and dermal irritation/corrosion potential of pharmaceutical compounds for worker safety. *Cutan. Ocul. Toxicol.* 2018 Jul 23:1-11. doi: 10.1080/15569527.2018.1483944. [Epub ahead of print] (PMID 30035615).

Bolon B, Krinke, G, Butt MT, Rao DB, Pardo ID, Jortner BS, Jensen K, Garman RH, Andrew-Jones L, Morrison JP, Sharma AK, and Thibodeau MS. STP Position Paper: Recommended Practices for Sampling and Processing of the Peripheral Nervous System (Nerves, Somatic, and Autonomic Ganglia) during Nonclinical Toxicity Studies. *Toxicol Pathol.* 2018;46(4): 372-402.

Caitlin, NR, Wilson, JW, Creasy, DM, Rao, DB, Kissling GE, McIntyre, BS, and Wyde M. Differentiating the testicular toxicological response from sexual maturity in the inhalation toxicity studies with ortho-phthalaldehyde. *Toxicol Pathol.* Accepted 31 July, 2018.

Pardo, ID (co-chair), Rao, DB (co-chair), Butt, MT, Jortner, BS, Valentine WM, Arezzo J, Sharma, AK, and Bolon, B. Continuing Education Course # 3: Toxicologic Pathology of the Peripheral Nervous System (PNS) – Overview, Challenges and Current Practices, *Toxicol Pathol.* Accepted August 20, 2018.

Gad, SC and Schuh, JCL, (2018) Points to Consider for Toxicologic Pathologists Evaluating Biomaterials and Medical Devices, *Toxicol Pathol*, 46:366-371.

Zeltinger, J, Brandom, D, Weng, S-C, Schultz, R, McClanahan, R, Bolikal, D, Gram, D Gad, SC and L Kabanova, (2018) Metabolism, Disposition and Pharmacokinetics of Polymer Compounds Used in the First, Biodegradable, Radiopaque Coronary Vascular Scaffold (in press).

Gad, SC, Sullivan, DW, Mujer, CV, Spainhour, CB and JD Crapo, (2018) Nonclinical Safety and Toxicokinetics of MnTE-2-PyP (BMX-010), a Topical Agent in Phase Two Trials for Psoriasis and Atopic Dermatitis, *Int. J. Toxicol*, (submitted).

Guidances and Regulatory Documents

Patton, GW (participating expert), **OECD Guidance Document on Good In Vitro Method Practices** (GIVIMP), Organisation for Economic Co-operation and Development, September 4, 2018. [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/JM/MONO\(2018\)19&doclanguage=en](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/JM/MONO(2018)19&doclanguage=en)

Presentations

Lectures and Oral Communications

Costin, GE, Non-Animal Testing Technologies and Strategies Used for Chemical Hazard and Risk Assessment, Spring Meeting of the Society of Chemical Hazard Communication, 25 April 2018, Orlando, FL, USA.

Costin, GE, Hill, E, Brown, J and R Curren, 2018, Development of a Non-animal Method for Biocompatibility Assessment of Personal Lubricants under the US FDA's MDDT Program, 7th Annual Meeting of the American Society for Cellular and Computational Toxicology, 11 September 2018, Bethesda, MD, USA.

Costin, GE, 2018, Non-Animal Testing Technologies and Strategies: Supporting Global Product Stewardship, Product Stewardship Conference, 29 September 2018, Washington, DC, USA.

Rao, DB (organizer and co-chair), FDA public scientific workshop on “Regulatory Perspectives on Otic and Vestibular Toxicity: Challenges in Translating Animal Studies to Human Risk Assessment” Tuesday, August 21st, 2018, Silver Spring, MD, USA.

Rao, DB (co-chair), Continuing Education Course on “Toxicologic Pathology of the Peripheral Nervous System”, Society of Toxicologic Pathology Annual Symposium, June 24, 2018, Indianapolis, IN, USA.

Rao, DB, Case Presentation – “Towards Quantitative Assessments in Peripheral Nervous System Pathology: A Case Study”. Continuing Education Course on “Toxicologic Pathology of the Peripheral Nervous System”, Society of Toxicologic Pathology Annual Symposium, June 24, 2018, Indianapolis, IN, USA

Posters

Mihalchik-Burhans, AL, Rogers, EN, Gad-McDonald, SE, Sullivan, DW and SC Gad, (2018) Development of Dermal Permissible Daily Exposure (PDE) Levels for Elemental Impurities by Utilizing Data from Alternative Routes. Presented at the annual Society of Toxicology meeting, San Antonio, TX, March, 2018.